

# Protecting health in the communities surrounding Exide



Angelo J Bellomo  
Deputy Director for Health Protection



# Need for County action

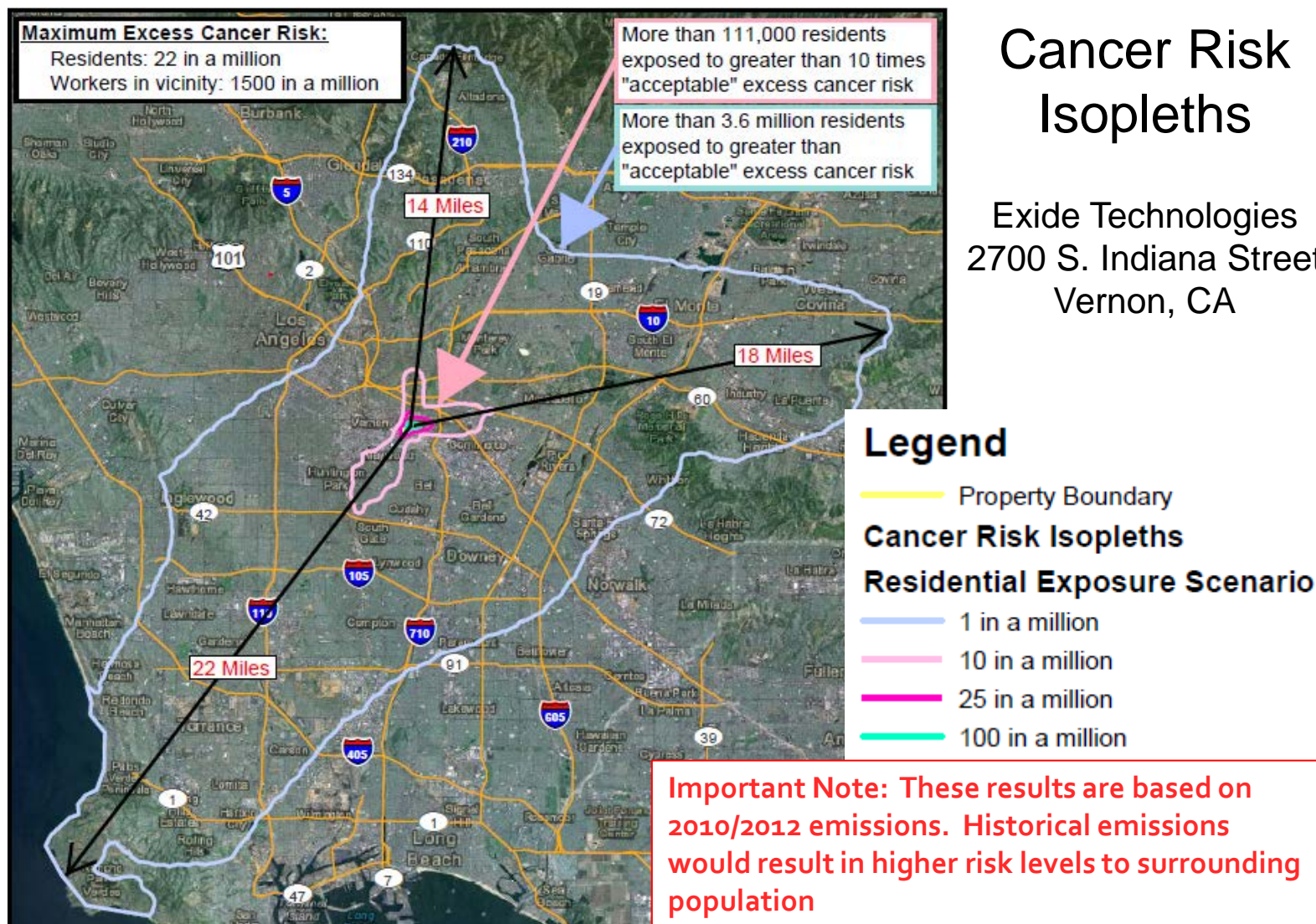
- Magnitude of Exide's chemical emissions
  - 3,458 tons (7 million lbs.) of lead released to air
  - Elevated health risk to more than 100,000 residents
- Exide's long record of non-compliance and criminal violations
- State's poor record of oversight and failure to cleanup with due level of urgency

# Key chemicals emitted by Exide:

## Possible health effects

<u>Chemical</u>	<u>Health Effects</u>
Lead	<ul style="list-style-type: none"><li>• Lower IQ, learning disabilities, behavior disorders, hearing problems, and abnormal bone growth in children</li><li>• Increased risk of violent crime and delinquent behavior in teens and adults</li><li>• Kidney &amp; nerve damage, anemia, and high blood pressure</li><li>• Problems with fertility, mood, memory, coordination, and vision</li></ul>
Benzene	<ul style="list-style-type: none"><li>• Increased risk of cancer (acute myelogenous leukemia)</li><li>• Anemia, immune system problems</li></ul>
1,3-Butadiene	<ul style="list-style-type: none"><li>• Increased risk of cancer (stomach, blood, and lymphatic system)</li></ul>
Arsenic	<ul style="list-style-type: none"><li>• Increased risk of cancer (liver, bladder, lungs, and skin/soft tissue)</li><li>• Skin discoloration</li><li>• Lower life expectancy</li></ul>

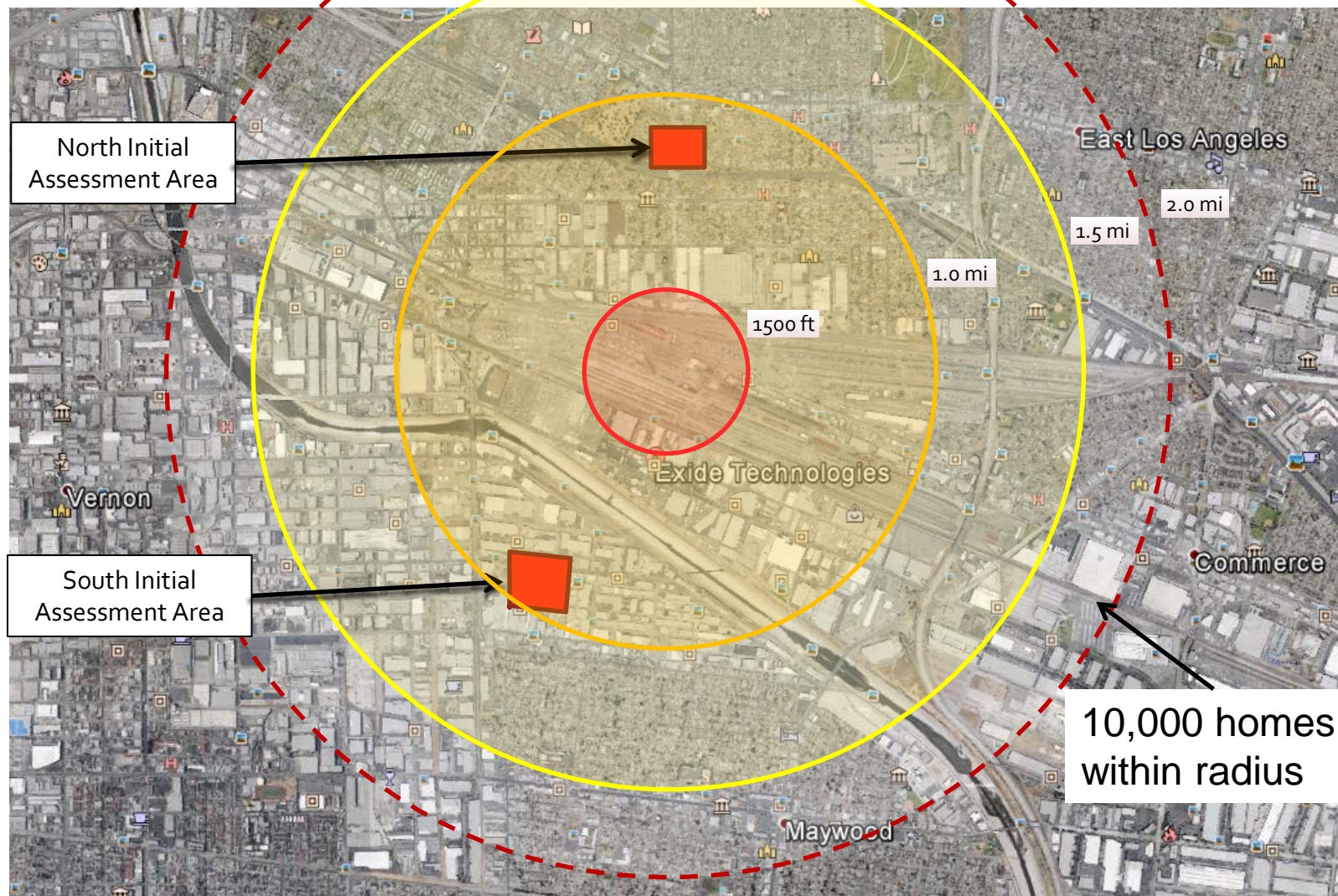




\*Modified from "Revised AB2588 Health Risk Assessment" January 2013



# Widespread soil contamination



# County priority actions

- A. Rapid testing and prioritization of residential properties
- B. Facilitate cleaning of contaminated home interiors
- C. Assessment of industrial and commercial areas
- D. Enhanced medical screening for early detection of disease in the community
- E. Expedite State cleanup of affected properties through legal and political means





# Rapid testing of residential properties

## Approach to testing

- Multiple teams
- Use of direct-reading instruments

## Phased assessment

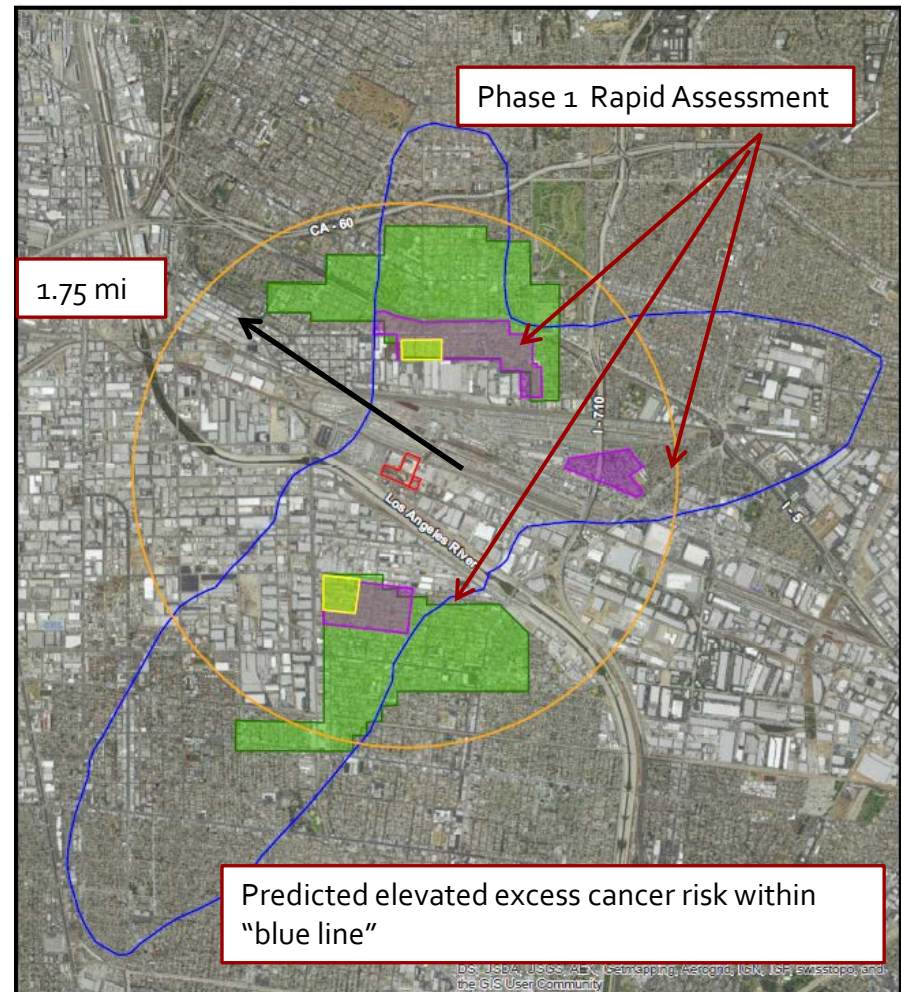
- Phase 1: 1000 homes
- Phase 2: 9000 homes

## Time to complete Phase 1

- 60 days after access agreements in place

## Expected cost

- ~\$1M (~\$850/home)



# Estimated number of homes requiring cleanup per DTSC protocol

Lead Concentration (mg/kg)	Regulatory Criteria	DTSC Cleanup Priority	Projected No. of Homes
> 1,000	"Hazardous Waste" Level	1	1,000
> 400	Federal Residential Action Level	2	3,000
> 80	DTSC Residential Cleanup Level	3	6,000
<b>TOTAL HOMES</b>			<b>10,000</b>





# Current and future health needs of the community

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- Insurance enrollment assistance for eligible residents; connecting patients with established providers; and working with the Medi-Cal to improve access to services.
- Outreach to local clinical providers on key risk areas to improve early disease detection.
- Cancer-screening for early detection, diagnosis, and treatment.
- Early screening for childhood asthma, affordable access to medications, and asthma education for patients, families, and local schools.
- Screening and intervention for children with learning difficulties and behavioral conditions.

# Estimated costs

- Rapid assessment of affected homes - Phase 1 \$800 k
- Assessment of industrial / commercial area \$250 k
- Facilitate effective cleaning of home interiors \$450 k
- Outreach & assistance \$500 k
  - Public information campaign
  - Outreach to residents & health care providers
  - Screening for uninsured
  - Emergencies